

Application No. 10/862,867
Amendment Dated 2/21/2006
Reply to Office Action dated 12/21/2005

Entry
accepted

LDR

38-06

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 (currently amended). An optical device for measuring a distance between the optical device and an object, the optical device comprising:

an optical source for emitting a beam of electromagnetic radiation;

a focusing optical member for focusing the beam of electromagnetic radiation into a micro-mirror incident pattern;

a micro-mirror array receiving the micro-mirror incident pattern and outputting a controlled radiation pattern;

a processor for selecting a resolution level of the controlled radiation pattern of narrower beam size based on a previous lower resolution scan of greater beam size over a greater area; and

a transmission optical member for focusing the controlled radiation pattern toward an object for estimation of a distance of the object from the optical device, where a first scan is directed to a background object and a potential foreground object and wherein a second scan is directed at the potential foreground object to verify the presence or absence of the potential foreground object.

2 (original). The optical device according to claim 1 wherein the micro-mirror array comprises a microelectromechanical system.

3 (original). The optical device according to claim 1 wherein the micro-mirror array comprises an array of deformable reflective members and a controller for controlling the deformable reflective members to direct the controlled radiation pattern.

4 (original). The optical device according to claim 1 further comprising a beam adjuster, the beam adjuster activating successive members of the micro-mirror array prior to the time that a change in the position of the member is actually required to reduce a response time of the micro-mirror array.

5 (original). The optical device according to claim 1 wherein the controlled radiation